
**TRAVEL TIME SYSTEM TYPE "C"
DEVICE TESTING - LEVEL A**

Project Name: _____

Federal Project #: _____

Test Date: _____

TTS # _____ Route: _____ MM _____.

NB/SB/EB/WB/Median

Nearest Side Street Name: _____

This procedure outlines Level A device test to be performed on Travel Time System. Perform following tests at controller TTS cabinet to demonstrate that the individual devices at each work site are fully operational.

BLUETOOTH READER DEVICE INFO

Unit Type: _____

Unit ID: _____ City: _____

XF1: _____

If Solar Battery Voltage measured: _____

From website: _____

Name of unit for website: _____

Latitude: _____ Longitude: _____

Software: _____

IP Address: _____

Structure Type: _____

Structure #: _____

Height from ground level (Feet): _____

Verify unit is setup and reporting to the host server/webpage.

Pass / Fail

Attach device report printout for 15 min interval. Ensure that report includes Time, Date (Month/Day/Year), and MAC address.

Pass / Fail

Enable Alarms: ON

Email address 1: N/A

Email address 2: N/A

**TRAVEL TIME SYSTEM TYPE "C"
DEVICE TESTING - LEVEL B**

Project Name: _____

Federal Project #: _____

Test Date: _____

TTS # _____ Route: _____ MM _____.

NB/SB/EB/WB/Median

Nearest Side Street Name: _____

PAIR INFO

This device testing demonstrates that each device is fully operational from the designated control center to the device work site after integration into the designated control center software management systems.

Testing Procedures:

1. Obtain the link origin, link destination and link distance in feet and miles.
2. Drive a probe vehicle between the links and note the travel time while another person monitor and note the travel time measured by TTS at TTS server.
3. Repeat this process three times for each link at various times of the day as approved by RE.
4. Determine the difference in travel time measured by probe vehicle and TTS.
5. Link will pass if probe vehicle Travel Time is within ___% of TTS Server Travel Time. Confirm % with RE.

Website Pair No.	Unit 1	Unit 2	Direction	Distance	Speed	Smoothing Method	(Verify)
							<input type="checkbox"/>

Link Origin	
Link Destination	
Straight-Line Diagram Applicable Pages	

Travel Time from Server (ST)	Travel Time from Probe Vehicle (PV)	Time Difference (PV-ST) (mm:ss)	Result (Percentage)

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XML FEED / TRANSCOM TEST

This procedure outlines the device test to be performed on the Travel Time System to ensure the successful display of travel time on selected dynamic message signs from the TTS Type C Device (Bluetooth) location. After the Contractor's verification test, the Department will conduct a 14-day observational and functional test period.

Test Procedure:

1. Obtain the list & locations of dynamic message signs (DMS) from TOC for displaying travel times for each link.
2. Obtain travel time from Transcom for link being tested.
3. Match XML feed from Transcom against the travel time reported by the host server.
4. Verify the display of correct travel time on all selected dynamic message signs for each link.

Link Origin	Link Destination	Travel Time from Transcom Server (mm:ss)	Travel Time Reported by Host Server	Verify Display of Correct Travel Time on all Selected DMS Signs	Result (Pass/Fail)

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Federal Project #: _____

Test Date: _____

TTS # _____ Route: _____ MM _____ . _____ NB/SB/EB/WB/Median

Nearest Side Street Name: _____

<p>LEVEL A TEST RESULTS:</p> <p>PASS <input type="checkbox"/> FAIL <input type="checkbox"/></p> <p>Correction Work Items:</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p>
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We agree that Level A testing of the Travel Time System has been performed and that the information above accurately represent the results of the test.

Contractor Name: _____

Contractor Representative Name: _____

Signature and Date: _____

ITS Inspector Name: _____

Signature and Date: _____

Corrected Work Items:

ITS Inspector Signatures & Date

1. _____
2. _____
3. _____
4. _____
5. _____

- | |
|-------|
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |

**TRAVEL TIME SYSTEM TYPE "C"
DEVICE TESTING - LEVEL B**

Project Name: _____

Federal Project #: _____

Test Date: _____

TTS # _____ Route: _____ MM _____.

NB/SB/EB/WB/Median

Nearest Side Street Name: _____

<p>LEVEL B TEST RESULTS:</p> <p>PASS <input type="checkbox"/> FAIL <input type="checkbox"/></p> <p>Correction Work Items:</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p>
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We agree that Level C testing of the Travel Time System has been performed and that the information above accurately represent the results of the test.

Contractor Name: _____

Contractor Representative Name: _____

Signature and Date: _____

ITS Inspector Name: _____

Signature and Date: _____

TSM Representative Name: _____

Signature and Date: _____

Corrected Work Items:

ITS Inspector Signatures & Date

1. _____
2. _____
3. _____
4. _____
5. _____

- | |
|-------|
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |

**TRAVEL TIME SYSTEM TYPE "C"
DEVICE TESTING - LEVEL C**

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Federal Project #: _____

Test Date: _____

TTS # _____ Route: _____ MM _____.

NB/SB/EB/WB/Median

Nearest Side Street Name: _____

<p>LEVEL C TEST RESULTS:</p> <p>PASS <input type="checkbox"/> FAIL <input type="checkbox"/></p> <p>Correction Work Items:</p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p>
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We agree that Level C testing of the Travel Time System has been performed and that the information above accurately represent the results of the test.

Contractor Name: _____

Contractor Representative Name: _____

Signature and Date: _____

ITS Inspector Name: _____

Signature and Date: _____

TSM Representative Name: _____

Signature and Date: _____

Resident Engineer Name: _____

Signature and Date: _____

Corrected Work Items:

ITS Inspector Signatures & Date

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

- _____
- _____
- _____
- _____
- _____